

What is claimed as new and desired to be protected by Letter Patent is set forth in the appended claims.

1. A safe botanical drug for treatment and prevention of malignant pleural effusion and cancer, and enhancement immune function comprises polysaccharide of Dang Gui (PDG) and Lan Xiang Xi (LX).
2. A safe botanical drug of claim 1 wherein the amount sufficient to inhibit oncogenes, induce differentiation of cancer cells, inhibit cancer cells proliferation, induce apoptosis of cancer cells, inhibit growth of transplanted tumors, and inhibit cancer incidence, is about 50-200mg of LX derivate.
3. A safe botanical drug of claim 1 wherein the amount sufficient to enhance immune function and inhibit oncogenes and cancer incidence, is about 25-100mg of PDG.
4. A safe botanical drug of claim 1 wherein the amount sufficient to inhibit oncogenes, induce differentiation of cancer cells, inhibit cancer cells proliferation, induce apoptosis of cancer cells, inhibit growth of transplanted tumors, and inhibit cancer incidence, is about 50-200mg of LX and PDG derivate.
5. A composition, according to claim 1, wherein said LX is extracted from plant of *Dryobalanops aromatica* Gaerin or Wen E Shu.
6. A composition, according to claim 1, wherein said polysaccharides of Dang Gui (PDG) is extracted from Dang Gui.
7. A pharmaceutical composition of claim1, wherein said dosage form is comprises LX and a pharmaceutical acceptable carrier.
8. A pharmaceutical composition of claim1, wherein said dosage form is comprises LX and PDG and a pharmaceutical acceptable carrier.
9. A composition in accordance with claim 7 in injection solution dosage unit form.
10. A composition in accordance with claim 8 in injection solution dosage unit form.
11. A process for producing LX, which used for treatment and prevention of malignant pleural effusion and cancer and enhancement immune function of claim 1 is comprising:
  - a. extracting a powder of *Dryobalanops aromatica* Gaerin or Wen E Shu with water;
  - b. the filtrate was saved and filtercake extracted with water again,

- c. the filtrate combined and distilled under pressure;
- d. the distilled mixture was separated and oil fraction was kept at 0°C;
- e. the oil distilled under reduced pressure (50°-80°C/40 Pa) and fraction was collected;
- f. the fraction was distilled under reduced pressure (76°-78°C/40 Pa) and fraction B was collected;
- g. the fraction B was chromatographed on silica gel G and using petroleum ether as developing solvent;
- h. the solvent collected and dried; and
- i. the final product is LX.

12. A process for producing polysaccharides of Dang Gui (PDG), which used for control cancer cells of claim 1 is comprising:

- a. extracting a powder of Dang Gui with water by boiling first and then simmering for 1.5 hours;
- b. filtering the extract from the powder residue;
- c. concentrating the extract under reduced pressure;
- d. adding 95% ethanol to the concentrate of (c), to produce a 60% ethanol solution to form a precipitate;
- e. separating the precipitate from the ethanol solution;
- f. dissolving the precipitate in water,
- g. concentrating the filtrate of (f) under reduced pressure;
- h. adding 95% ethanol to the concentrated filtrate to yield an 80% ethanol solution;
- i. cooling the 80% ethanol solution to form a precipitate;
- j. separating the precipitate and drying same under vacuum to yield a final powder;.
- k. washing said product with 95% ethanol three times;
- l. washing the product of (k), consecutively with acetone and ether twice;
- m. vacuum drying the product of (l) and.
- n. The final product is PDG.

13. A safe botanical drug, according to claim 1, wherein said LX determined by HPLC and the special index is  $y = 1.32 \chi - 0.03$ ,  $\gamma = 0.9999$ .

14. A safe botanical drug comprising a polysaccharide of Dang Gui containing soybean-liposomes (DGL) and LX-containing soybean-liposomes (LXL) is used for treatment and prevention of malignant pleural effusion and cancer, and enhancement immune function.
15. The safe botanical drug of claim 14, wherein the amount sufficient for treatment and prevention of malignant pleural effusion and cancer, and enhancement immune function is about 20-40mg of DGL and 20-40 mg of LXL.
16. A safe botanical drug in accordance with claim 14 wherein said liposomes contained hydrogenated phosphatidyl choline (PC), phosphatidyl glycerol (PG), and phosphatidyl serine (PS), which purified from soybean.
17. A process for producing DGL and LXL, which used for treatment and prevention of malignant pleural effusion and cancer, and enhancement immune function of claim 13 comprising:
  - a. Phosphatidyl choline (PC), phosphatidyl glycerol (PG), and phosphatidyl serine (PS), were purified from soybean;
  - b. PC, PG, and PS were purified on silicic acid columns;
  - c. PC, PG, and PS mixed with cholesterol (CHOL) and long-chain alcohol;
  - d. Lipids were dissolved in the organic phase and reversed phase would be formed;
  - e. PDG or LX was added at lipid systems and resulting two-phase system was sonicated 3 minutes; and
  - f. PDGL or LXL was sealed and sterilized.
18. A safe composition to claim 14 wherein said DGL used for enhancement of immune function and inhibiting oncogenes and cancer incidence.
19. A safe composition to claim 14 wherein said LXL used for inhibiting oncogenes.
20. A safe composition to claim 14 wherein said LXL used for inducing differentiation of cancer cells.
21. A safe composition to claim 14 wherein said LXL used for inhibiting cancer cells proliferation.
22. A safe composition to claim 14 wherein said LXL used for inducing apoptosis of cancer cells.
23. A safe composition to claim 14 wherein said LXL used for inhibiting growth of transplanted tumors.

24. A safe botanical composition to claim 14 wherein said LXL used for inhibiting cancer incidence.
25. A safe botanical composition to claim 14 wherein said PDGL enhancement of immune function, inhibiting oncogenes and cancer incidence.
26. Safe botanical drug (LX, LXL and PDG), which used for treatment and prevention of malignant pleural effusion and cancer, and enhancement immune function, comprises the following toxicological and pharmacokinetics indexes:
  - a. LD<sub>50</sub> of LX is 340mg/kg.
  - b. LD<sub>50</sub> of LXL is 721mg/kg.
  - c. LD<sub>50</sub> of PDG is > 1g/kg, and
  - d. Elimination of LX is rapid.